LineUp With Math™ Alignment
Wisconsin Model Academic Standards
Mathematics Content Standards and Performance Standards

Content Standard A. Mathematical Processes

Students in Wisconsin will draw on a broad body of mathematical knowledge and apply a variety of mathematical skills and strategies, including reasoning, oral and written communication, and the use of appropriate technology, when solving mathematical, real-world and non-routine problems.

Performance Standards	***LineUp With Math™* Activities**
A.8.1 Use reasoning abilities to: • evaluate information • perceive patterns • identify relationships • formulate questions for further exploration • evaluate strategies • justify statements • test reasonableness of results • defend work	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios. --Explore and apply a variety of strategies to optimize the solution of air traffic control conflicts. --Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.
A.8.2 Communicate logical arguments clearly to show why a result makes sense	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

Content Standard B - Number Operations And Relationships

Students in Wisconsin will use numbers effectively for various purposes, such as counting, measuring, estimating, and problem solving.

Performance Standards	***LineUp With Math™* Activities**
B.8.5 Apply proportional thinking in a variety of problem situations that include, but are not limited to • ratios and proportions (e.g., rates, scale drawings*, similarity*) • percents, including those greater than 100 and less than one (e.g., discounts, rate of increase or decrease, sales tax)	--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control. --Use percent relationships to resolve distance, rate, time conflicts in air traffic control.

Content Standard D: Measurement

Students in Wisconsin will select and use appropriate tools (including technology) and techniques to measure things to a specified degree of accuracy. They will use measurements in problem-solving situations.

Performance Standards	***LineUp With Math™* Activities**
D.8.3 Determine measurement directly* using standard units (metric and US Customary) with these suggested degrees of accuracy • elapsed time to the nearest second	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
D.8.4 Determine measurements indirectly* using • estimation • ratio and proportion (e.g., similarity*, scale drawings*)	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations. --Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.

Content Standard F: Algebraic Relationships

Students in Wisconsin will discover, describe, and generalize simple and complex patterns and relationships. In the context of real-world problem situations, the student will use algebraic techniques to define and describe the problem to determine and justify appropriate solutions.

Performance Standards	***LineUp With Math™* Activities**
F.8.2 Work with linear and nonlinear patterns* and relationships in a variety of ways, including • representing them with tables, with graphs, and with algebraic expressions, equations, and inequalities • describing and interpreting their graphical representations (e.g., slope*, rate of change, intercepts*) • using them as models of real-world phenomena • describing a real-world phenomenon that a given graph might represent	--Use an interactive simulator to identify distance, rate, time conflicts in air traffic control problems and resolve the conflicts by varying plane speeds or changing plane routes.